



Caspase-9 (phospho Ser144) Polyclonal Antibody

Catalog No	YP-Ab-00204
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	CASP9
Immunogen	The antiserum was produced against synthesized peptide derived from human Caspase 9 around the phosphorylation site of Ser144. AA range:110-159
Specificity	Phospho-Caspase-9 (S144) Polyclonal Antibody detects endogenous levels of Caspase-9 protein only when phosphorylated at S144.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Caspase-9;CASP9;Caspase9;MCH6;CASP-9;Apoptotic protease Mch-6; Apoptotic protease-activating factor 3;APAF-3;ICE-like apoptotic protease 6;ICE-LAP6
Observed Band	35kD
Calculated Molecular Weight	35kD
Cell Pathway	nucleus,mitochondrion,cytosol,apoptosome,
Tissue Specificity	Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.
Function	catalytic activity:Strict requirement for an Asp residue at position P1 and with a marked preference for His at position P2. It has a preferred cleavage sequence of Leu-Gly-His-Asp- -Xaa.,function:Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates caspase-3. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP).,function:Isoform 2 lacks activity is an dominant-negative inhibitor of caspase-9.,online information:Caspase-9 entry,PTM:Cleavages at Asp-315 by granzyme B and at



Asp-330 by caspase-3 generate the two active subunits. Caspase-8 and -10 can also be involved in these processing events.,similarity:Belongs to the peptidase C14A family.,similarity:Contains 1 CARD domain.,subunit:Heterotetramer that consists of two anti-parallel arranged heterodimers

Background

CASP9 encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. Caspase 9 can undergo autoproteolytic processing and activation by the apoptosome, a protein complex of cytochrome c and the apoptotic peptidase activating factor 1; this step is thought to be one of the earliest in the caspase activation cascade. Caspase 9 is thought to play a central role in apoptosis and to be a tumor suppressor. Alternative splicing results in multiple transcript variants.

matters needing attention

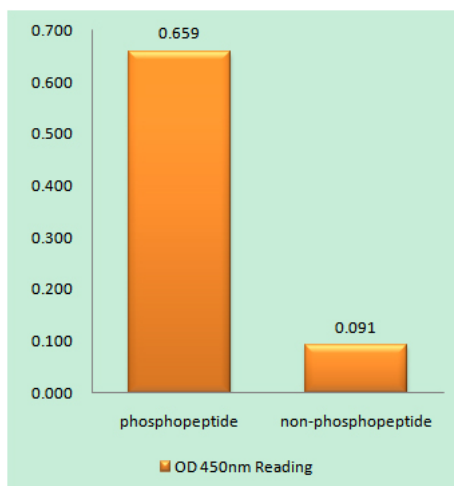
Avoid repeated freezing and thawing!

Usage suggestions

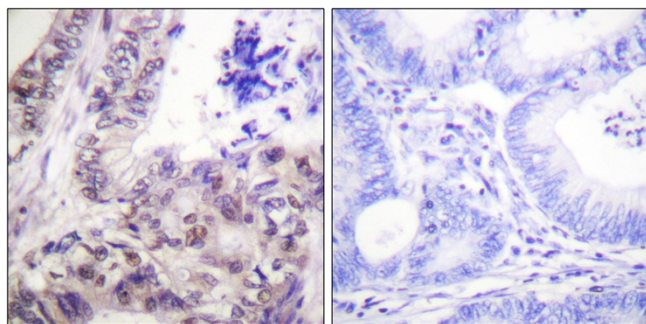
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



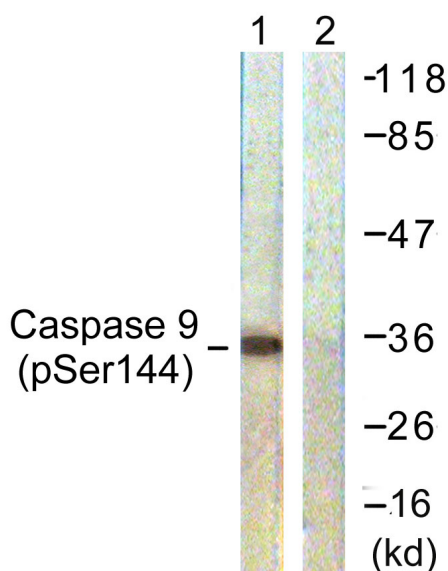
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Caspase 9 (Phospho-Ser144) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using Caspase 9 (Phospho-Ser144) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from K562 cells, using Caspase 9 (Phospho-Ser144) Antibody. The lane on the right is blocked with the phosphopeptide.